

# Midwest Industries

CASE  
SUMMARY

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## MIDWEST INDUSTRIES, INC.

Ida Grove, Iowa  
Ida County

Intern: Catherine Giese  
Major: Industrial Engineering  
School: The University of Iowa



### The Company

Midwest currently makes boat and personal watercraft trailers, utility trailers, boat and personal watercraft hoists, aluminum and cedar wood docks, and tractor hitches for Category I and II tractors. Midwest has 270 employees.

### Project Background

Currently, Midwest Industries actively recycles throughout its plant. Paper, wood pallets, wood waste, cardboard, plastics, steel, aluminum and many more items are recycled. The "Reduce, Reuse, Recycle" plan is followed as much as possible. The use of hazardous chemicals has been reduced significantly to save disposal costs and provide a safer environment for employees. Materials such as carpet and vinyl are reused for product protection and hardware bags. The company is currently evaluating additional options to recycle or reuse plastics, carpet scraps, vinyl scrap, and paint powder waste.

### Incentives to Change

Midwest decided to undertake this project because sending thousands of pounds of paint powder to the landfill created a significant monthly cost. Midwest believed its DNR Special Waste Authorization limits could be reduced drastically, and maybe eliminated entirely, if the powder waste problem could be solved.

### Results

#### Paint Kitchen Project:

The paint kitchen was redesigned to allow for separation of light and dark colors so that black powder could be reclaimed. New hoses were run for both light and dark colors and lines were dedicated to allow one side to run the dark colors and the other side to run the light colors. After this project was completed, Midwest's contamination was proven to be less than .5 percent.

#### Material Substitution:

It has been suggested that instead of using high gloss jet-black, Midwest purchase and use a glossy metallic black. This new black would be able to hide the little contamination left in the



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collected waste so that Midwest could reclaim the powder, saving money on reworks and scrap.

#### Recycle:

A company has offered to take Midwest's waste powder if the powder is filtered and separated into whites and blacks. Most of the waste powder would be used to make adhesives, speed bumps or to rework parts that are not visible to the customer.

#### Savings:

Midwest could save a total of \$85,200 per year and potentially displace a total of 17,200 pounds of powder from the landfill per year.

Project Summary Table

P2/Waste Reduction Option	Waste Reduced per Year	Raw Materials Saved per Year	Cost Savings per Year	Status
Ability to reclaim black	15,000 lbs	15,000 lbs	\$45,000	Not yet implemented Actively pursuing
Dedicated white powder hopper	900 lbs	900 lbs	\$2,700	Implemented
Company to take powder	1,000 lbs	0 lbs	0	Not yet implemented Actively pursuing
Saving in scrap and rework by eliminating contamination	200 lbs	200 lbs	\$37,500	Recommended
Total	17,200 lbs	16,200 lbs	\$85,200	